



Bullock, Bennett & Associates, LLC

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CLOSURE PLAN - ADDENDUM NO. 2

**Martin Lake Steam Electric Station - Ash Pond Area
Rusk County, Texas**

Submitted to:

Luminant Generation Company LLC

Submitted by:

BULLOCK, BENNETT & ASSOCIATES, LLC

165 N. Lampasas Street

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(512) 355-9198

Texas Professional Engineering Firm No. 8542

Texas Geoscience Firm No. 50127

February 2024

BBA Project No. 24643-01-2024

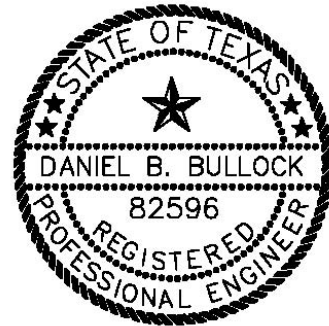
PROFESSIONAL CERTIFICATION

Bullock, Bennett & Associates, LLC (BBA) is certifying this document to address the Texas Commission on Environmental Quality (TCEQ) Notice of Deficiency (NOD) No. 3 comments for the Martin Lake Steam Electric Station issued December 22, 2023. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I hereby certify that Addendum No.2 to the Closure Plan for the Ash Ponds at the Martin Lake Steam Electric Station has been prepared in accordance with the requirements of 40 C.F.R. §257.102(b).



Daniel B. Bullock, P.E.
Principal Engineer
Bullock, Bennett & Associates, LLC



Date 2/26/2024

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DOCUMENT REVISION RECORD

| Issue No. | Date | Details of Revisions |
|------------|---------------|---|
| Revision 0 | October 2016 | Original Document |
| Addendum 1 | December 2022 | Revised configuration of final cap/cover system for Ash Ponds, added equivalency determination for proposed alternative final cover systems, added cap settlement evaluation, added confirmation that cap slope stability will be modeled using site-specific geotechnical data during final closure design, removal of HELP Modeling from Closure Plan, revised closure schedule to state closure will be completed within five years and add estimated completion year, added section addressing the initiation of closure, and added section to address notification citations |
| Addendum 2 | February 2024 | Revised Figure 3, Existing Site Conditions, to specify what existing contours represent; signed, sealed and dated by Texas Licensed P.E.. Revised Figure 4, Proposed Grading Plan, to add statement that final elevations will be provided during closure of the CCR unit; signed, sealed and dated by Texas Licensed P.E.. |

1.0 INTRODUCTION

On behalf of Luminant Generation Company LLC (Luminant), Bullock, Bennett & Associates, LLC (BBA) has prepared this Addendum No. 2 to the Closure Plan for the East Ash Pond (EAP), West Ash Pond (WAP), and New Scrubber Pond (NSP) (collectively referred to as the “Ash Ponds”) located at the Martin Lake Steam Electric Station (MLSES) in Rusk County, Texas (hereafter, the “Site”). Coal Combustion Residuals (CCR) including flue gas desulfurization (FGD) wastewater and bottom ash generated as part of MLSES operation are managed in the Ash Ponds. The Ash Ponds are regulated as Existing CCR Impoundments under 40 C.F.R. §257, Subpart D (the “CCR Rule”), which has been adopted by the State of Texas under 30 T.A.C. §352.

The original Ash Ponds Closure Plan (PBW, 2016) and Closure Plan Addendum No. 1 (WSP Golder, 2022) was prepared in October 2016 and December 2022, respectively, in accordance with 40 C.F.R. §257.102(b) and placed in the MLSES operating record in accordance with 40 C.F.R. §257.105(h)(10). This Addendum No. 2 updates the Closure Plan to incorporate the changes described in Section 2.0.

2.0 ASH POND AREA CLOSURE PLAN REVISIONS

The following revisions were made to the Ash Pond Area Closure Plan in Addendum 2.

2.1 REVISIONS TO CLOSURE PLAN, ASH POND AREA, FIGURE 3 – EXISTING SITE CONDITIONS

Ash Pond Area Figure 3 was revised to specify what existing contours represent. Instead of using the original figure with all three ponds (EAP, WAP, and NSP), find attached the As-Built figure for each of the three ponds. From 2020 through 2023, the EAP, WAP, and NSP were each retrofitted with a new composite liner system meeting the alternative composite liner requirements of 40 CFR § 257.70(c) (HDR, 2021; HDR, 2022; HDR, 2023). The As-Built drawings reflect the existing site conditions for the bottom liner contours of the EAP, WAP, and NSP at the conclusion of the retrofitting work. Additionally, these drawings were signed, sealed, and dated by a Texas Licensed P.E.. These drawings can be found in Appendix A of this Addendum.

2.2 REVISIONS TO CLOSURE PLAN, ASH POND AREA, FIGURE 4 – PROPOSED GRADING PLAN

Ash Pond Area Figure 4 was revised with the signature and seal of a Texas Licensed P.E. and dated accordingly. Additionally, a statement was added to the drawing stating that final elevations for the CCR unit would be provided during closure. The revised drawing can be found in Appendix B of this Addendum.

3.0 REFERENCES

HDR (2021). Construction Completion and Construction Quality Assurance Report, CCR Impoundment Reline East Ash Pond, Martin Lake Steam Electric Station, May.

HDR (2022). Construction Completion and Construction Quality Assurance Report, CCR Impoundment Reline West Ash Pond, Martin Lake Steam Electric Station, June.

HDR (2023) Construction Completion and Construction Quality Assurance Report, CCR Impoundment Reline New Scrubber Pond, Martin Lake Steam Electric Station.

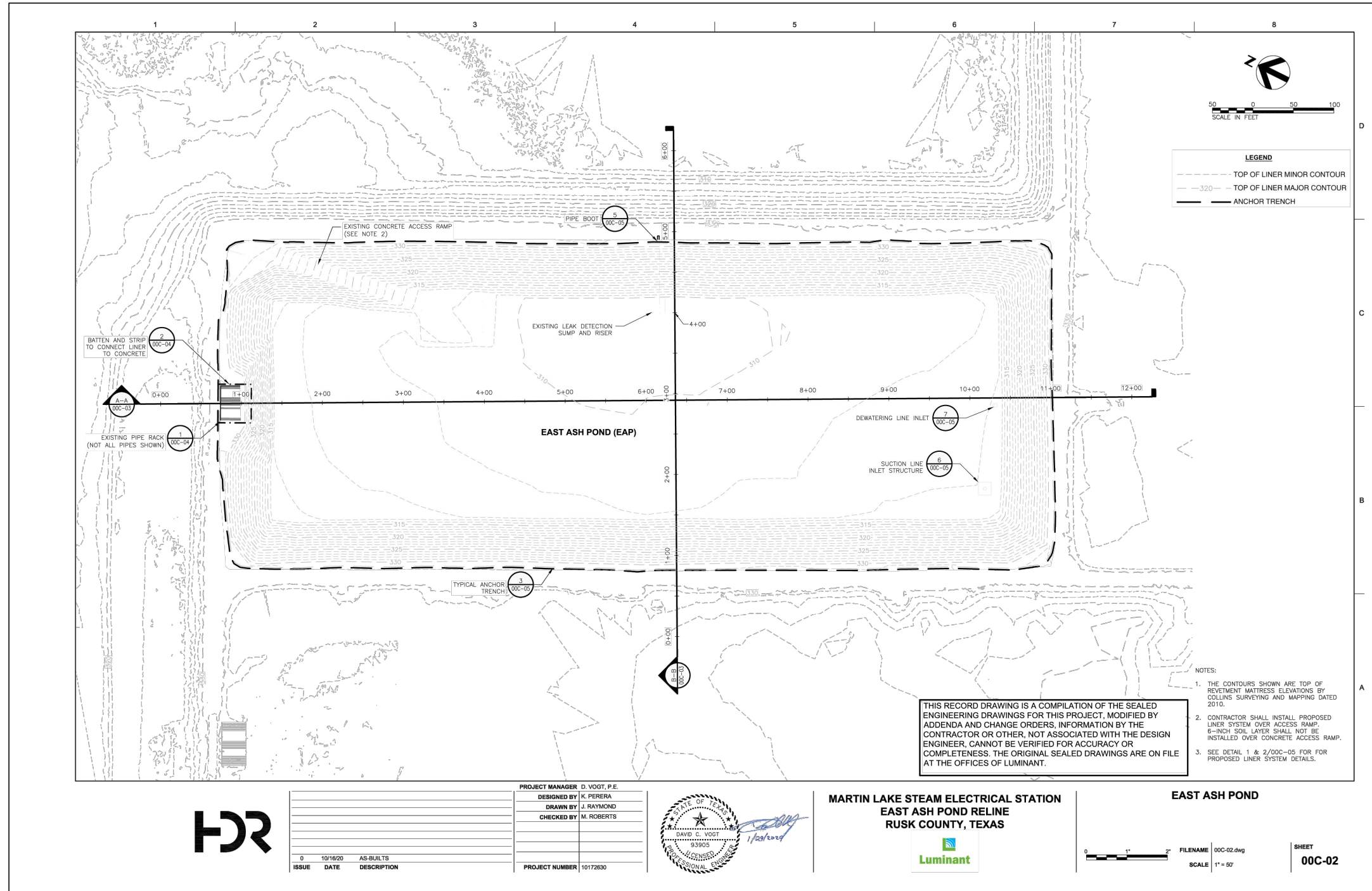
Pastor, Behling & Wheeler, LLC (PBW), 2016. CCR Closure Plan – Bottom Ash Ponds and New Scrubber Pond, Martin Lake Steam Electric Station. October.

WSP Golder, 2022. CCR Closure Plan Addendum No. 1 – Martin Lake Steam Electric Station – Ash Ponds. December.

APPENDIX A

Closure Plan, Ash Pond Area, Figure 3

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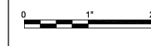


| ISSUE | DATE | DESCRIPTION |
|-------|----------|-------------|
| 0 | 10/16/20 | AS-BUILTS |

PROJECT MANAGER: D. VOGT, P.E.
 DESIGNED BY: K. PERERA
 DRAWN BY: J. RAYMOND
 CHECKED BY: M. ROBERTS
 PROJECT NUMBER: 10172630



MARTIN LAKE STEAM ELECTRICAL STATION
 EAST ASH POND RELINE
 RUSK COUNTY, TEXAS



FILENAME: 00C-02.dwg
 SCALE: 1" = 50'

SHEET
 00C-02

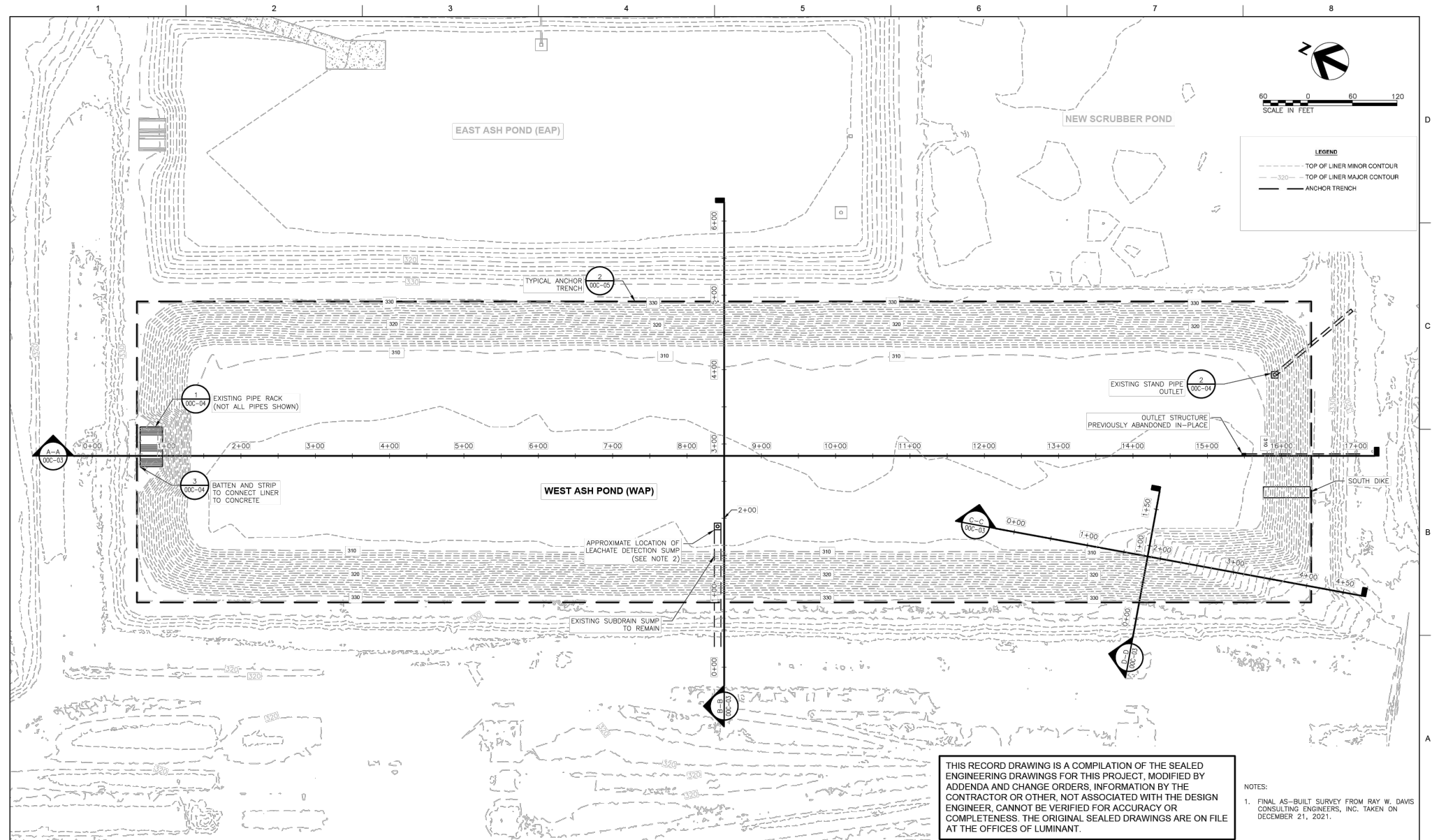
Luminant
 Martin Lake Steam Electric Station

Figure 3A
EAST ASH POND
EXISTING SITE CONDITIONS

| | | | |
|----------------|-------------|----------------|--------------|
| PROJECT: 24643 | BY: RCAD-RR | DATE: FEB 2024 | CHECKED: DBB |
|----------------|-------------|----------------|--------------|

Bullock, Bennett & Associates, LLC
 Engineering and Geoscience
 Texas Registrations: Engineering F-8542, Geoscience 50127

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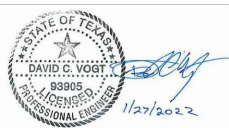
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NOTES:
 1. FINAL AS-BUILT SURVEY FROM RAY W. DAVIS CONSULTING ENGINEERS, INC. TAKEN ON DECEMBER 21, 2021.

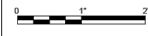


| ISSUE | DATE | DESCRIPTION |
|-------|------------|-------------------------------|
| C | 02/07/2022 | AS-CONSTRUCTED LINER DRAWINGS |
| B | 08/02/2021 | ADDED ACCESS RAMP |
| A | 01/31/2020 | ISSUED FOR BID |

PROJECT MANAGER: D. VOGT, P.E.
 DESIGNED BY: K. PERERA
 DRAWN BY: J. RAYMOND
 CHECKED BY: M. ROBERTS
 PROJECT NUMBER: 10172630



MARTIN LAKE STEAM ELECTRICAL STATION
 WEST ASH POND RELINE
 RUSK COUNTY, TEXAS



WEST ASH POND

FILENAME: 00C-02.dwg
 SCALE: 1" = 60'

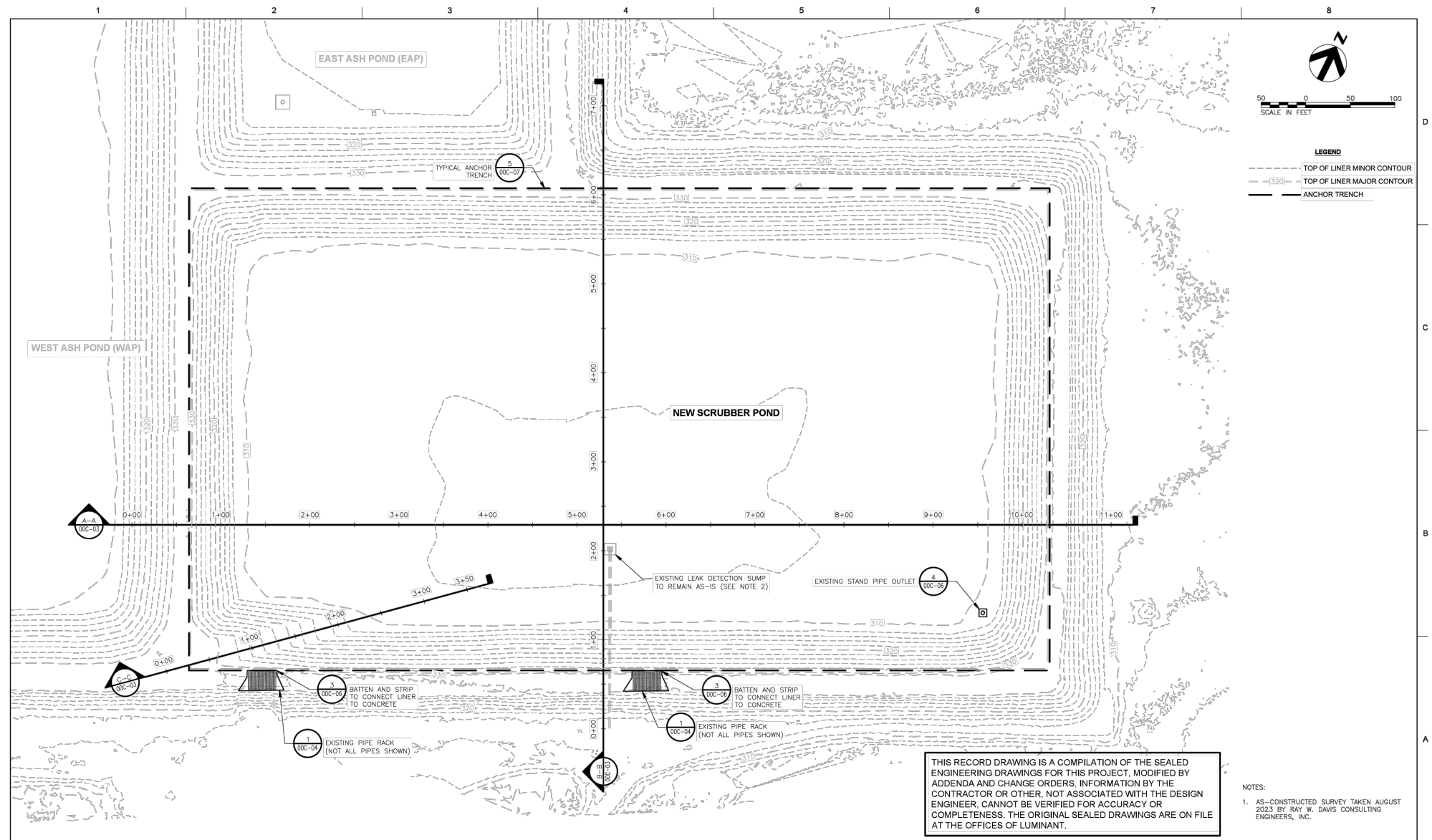
SHEET
 00C-02

Luminant
 Martin Lake Steam Electric Station

Figure 3B
WEST ASH POND
EXISTING SITE CONDITIONS

| | | | |
|---|-------------|----------------|--------------|
| PROJECT: 24643 | BY: RCAD-RR | DATE: FEB 2024 | CHECKED: DBB |
| Bullock, Bennett & Associates, LLC Engineering and Geoscience Texas Registrations: Engineering F-8542, Geoscience 50127 | | | |

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50 0 50 100
SCALE IN FEET

LEGEND
 --- TOP OF LINER MINOR CONTOUR
 --- TOP OF LINER MAJOR CONTOUR
 --- ANCHOR TRENCH

THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS. INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

NOTES:
 1. AS-CONSTRUCTED SURVEY TAKEN AUGUST 2023 BY RAY W. DAVIS CONSULTING ENGINEERS, INC.

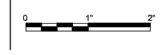


| ISSUE | DATE | DESCRIPTION |
|-------|------------|-------------------------------|
| D | 12/05/2023 | AS-CONSTRUCTED LINER DRAWINGS |
| C | 09/09/2023 | ISSUED FOR CONSTRUCTION |
| B | 09/21/2023 | ADDED ACCESS RAMP |
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|-----------------|---------------|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172930 |



MARTIN LAKE STEAM ELECTRICAL STATION
 NEW SCRUBBER POND RELINE
 RUSK COUNTY, TEXAS



FILENAME: 00C-02.dwg
 SCALE: 1" = 50'
 SHEET: 00C-02

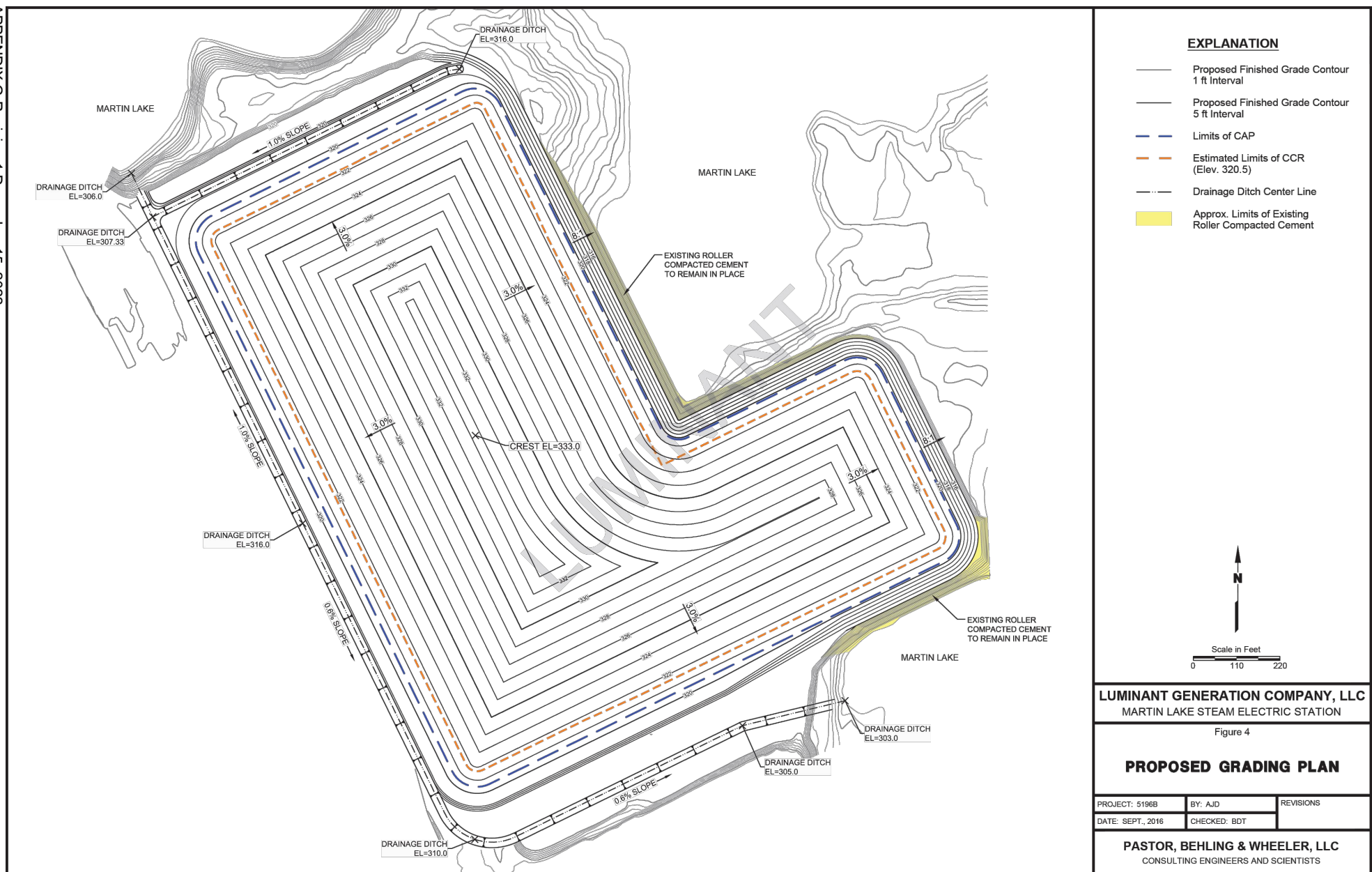
Luminant
 Martin Lake Steam Electric Station
 Figure 3C
NEW SCRUBBER POND
EXISTING SITE CONDITIONS

| | | | |
|--|-------------|----------------|--------------|
| PROJECT: 24643 | BY: RCAD-RR | DATE: FEB 2024 | CHECKED: DBB |
| Bullock, Bennett & Associates, LLC Engineering and Geoscience Texas Registrations: Engineering F-8542, Geoscience 50127 | | | |

APPENDIX B

Closure Plan, Ash Pond Area, Figure 4

APPENDIX G-Revision 1 December 15, 2022



EXPLANATION

- Proposed Finished Grade Contour 1 ft Interval
- Proposed Finished Grade Contour 5 ft Interval
- Limits of CAP
- Estimated Limits of CCR (Elev. 320.5)
- Drainage Ditch Center Line
- Approx. Limits of Existing Roller Compacted Cement



LUMINANT GENERATION COMPANY, LLC
MARTIN LAKE STEAM ELECTRIC STATION

Figure 4

PROPOSED GRADING PLAN

| | | |
|-------------------|--------------|-----------|
| PROJECT: 5196B | BY: AJD | REVISIONS |
| DATE: SEPT., 2016 | CHECKED: BDT | |

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

NOTE:

FINAL ELEVATIONS FOR THE UNIT WILL BE PROVIDED AT CLOSURE.



Daniel B. Bullock
2-8-2024

Luminant
Martin Lake Steam Electric Station

Figure 4

PROPOSED GRADING PLAN

| | | | |
|----------------|-------------|----------------|--------------|
| PROJECT: 24643 | BY: RCAD-RR | DATE: FEB 2024 | CHECKED: DBB |
|----------------|-------------|----------------|--------------|

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Engineering and Geoscience
Texas Registrations: Engineering F-8542, Geoscience 50127